

AMENDMENTS TO THE CLAIMS

A detailed listing of all claims that are, or were, in the present application, irrespective of whether the claim(s) remains under examination in the application are presented below. The claims are presented in ascending order and each includes one status identifier. Those claims not cancelled or withdrawn but amended by the current amendment utilize the following notations for amendment: 1. deleted matter is shown by strikethrough for six or more characters and double brackets for five or less characters; and 2. added matter is shown by underlining.

1. (Currently Amended) Arrangement for illuminating objects with light of different wavelengths in microscopes, automatic microscopes, and equipment for fluorescent microscopy applications comprising LED light sources for object illumination that are arranged in the illumination radiation path of the microscope or equipment, further comprising:

a receiving apparatus that is rotatable about an axis of rotation and that is provided with mounts for each of at least one LED, whereby said receiving apparatus is arranged in a housing that can be attached to an equipment housing or that is positioned in said equipment housing; and

[[in that]] a drive device for defined adjustment of said receiving apparatus ~~is provided~~ such that said at least one LED can be selectively positioned upstream of a light emission aperture of said housing with the effective wavelength that is required for measurements and/or observations.

2. (Previously Presented) Arrangement in accordance with claim 1, wherein said mounts are embodied and attached to said receiving apparatus such that the main emission direction of said at least one LED arranged thereon runs parallel to said axis of rotation.

3. (Currently Amended) Arrangement in accordance with claim 1, wherein said mounts of said receiving apparatus are embodied such that the main emission direction of said at least one LED arranged thereon runs radial to said axis of rotation.

4. (Previously Presented) Arrangement in accordance with claim 1 wherein collimator optics and a radiation homogenizer are provided in said equipment housing in the light direction downstream of said light emission aperture of said housing.
5. (Previously Presented) Arrangement in accordance with claim 1 wherein at least one of said LEDs is a white light LED emitting a white light.
6. (Previously Presented) Arrangement in accordance with claim 1 wherein a Peltier cooling element for cooling said LED is provided arranged between said mount of said receiving apparatus and said LED arranged thereon.
7. (Previously Presented) Arrangement in accordance with claim 1 wherein a halogen light source or another light source is arranged on at least one mount of said receiving apparatus.
8. (Previously Presented) Arrangement in accordance with claim 1, characterized in that said housing is arranged on said equipment housing using a rapid change ring in the form of a dovetail.
9. (Previously Presented) Arrangement in accordance with claim 1 wherein said at least one LED is arranged exchangeably in said mount without an associated Peltier cooling element.

10. (Previously Presented) Arrangement in accordance with claim 1 wherein said at least one LED is securely joined to said associated Peltier cooling element and can be arranged exchangeably in said mount together therewith.

11. (Previously Presented) Arrangement in accordance with claim 1, in combination with a microscope.

12. (Previously Presented) A light source for microscopes having an illumination ray path, the light source comprising:

a housing with a light emission aperture alignable with the illumination ray path;

an LED receiving apparatus rotatably mounted within the housing, the receiving apparatus having an axis of rotation; and

a plurality of LEDs, the LEDs each having light emission of different spectral characteristics, the LEDs mounted to the receiving apparatus whereby one of the LEDs of the plurality of LEDs may be selectively rotationally positioned upstream of the light emission aperture.

13. (Previously Presented) The light source of claim 12 wherein each of the LEDs has a main emission direction and wherein said main emission direction of each of the LEDs is aligned with the axis of rotation of the receiving apparatus.

14. (Previously Presented) The light source of claim 12 further comprising at least one of collimator optics and a radiation homogenizer attached to the housing and placeable in the light emission of the LEDs.

15. (Previously Presented) The light source of claim 12 further comprising a Peltier cooling element attached to an LED.

16. (Previously Presented) The light source of claim 12 in combination with a microscope, the light source attached to the microscope.